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- (71) Applicant (for all designated States except US): THE SECRETARY OF STATE FOR DEFENCE [GB/GB]; DSTL Porton Down, Salisbury, Wiltshire SP4 0JQ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MICHELL, Stephen, Lloyd [GB/GB]; DSTL, Porton Down, Salisbury, Wiltshire SP4 0JQ (GB). OYSTON, Petra, Claire, Farquhar [GB/GB]; DSTL, Porton Down, Salisbury, Wiltshire SP4 0JQ (GB). QUARRY, Janine, Elizabeth [GB/GB]; DSTL, Porton Down, Salisbury, Wiltshire SP4 0JQ (GB). TITBALL, Richard, William [GB/GB]; DSTL, Porton Down, Salisbury, Wiltshire SP4 0JQ (GB).
- (74) Agents: GREAVES, Carol, Pauline et al.; Greaves Brewster, Indigo House, Cheddar Business Park, Wedmore Road, Cheddar BS27 3EB (GB).
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(54) Title: LIVE VACCINE STRAIN

(57) Abstract: A strain of *Francisella* species wherein a gene which encodes an enzyme in the purine pathway has been inactivated, and which is able to produce a protective immune response in an animal, for use as a live prophylactic or therapeutic vaccine against infection by said *Francisella* species. Suitable genes for inactivation include the purF gene. Pharmaceutical compositions and methods which utilise these strains are also described and claimed.